Agenda Item Form

Agenda Date: Sept. 14, 2004

Districts Affected: All
Dept. Head/Contact Information: George G. Sarmiento

Type of Agenda Item:

- ☒ Resolution
- ☐ Tax Installment Agreements
- ☐ RFP/ BID/ Best Value Procurement
- ☐ Application for Facility Use
- ☐ Interlocal Agreements
- ☐ Other ____
- ☐ Staffing Table Changes
- ☐ Tax Refunds
- ☐ Budget Transfer
- ☐ Bldg. Permits/Inspection
- ☐ Contract/Lease Agreement
- ☐ Board Appointments
- ☐ Donations
- ☐ Item Placed by Citizen
- ☐ Introduction of Ordinance
- ☒ Grant Application

Funding Source:

- ☐ General Fund
- ☒ Grant (duration of funds: N/A Months)
- ☒ Other Source: ESRI AND Trimble software, hardware, and training

Legal:

☐ Legal Review Required Attorney Assigned (please scroll down): Matt Watson ☒ Approved ☐ Denied

Timeline Priority: ☒ High ☐ Medium ☐ Low # of days: 2days- must be signed by mayor and received by grantor by September 17, 2004

Why is this item necessary:
Expand capabilities and utilization of GIS

Explain Costs, including ongoing maintenance and operating expenditures, or Cost Savings:
Not applicable

Statutory or Citizen Concerns:
Not applicable

Departmental Concerns:
Assist the Planning Department to more efficiently maintain a current land use database on the City of El Paso

04 SEP -9 AM 9:11

CITY OF EL PASO, TEXAS
DEPARTMENT OF PLANNING, RESEARCH & DEVELOPMENT

MEMORANDUM

TO: The Honorable Mayor and City Council
Jim Martinez, Chief Administrative Officer
Patricia D. Adauto, Deputy Chief Administrative Officer
Laura Uribarri, Executive Assistant to the Mayor
Adrian Ocegueda, Executive Assistant to the Mayor

FROM: Rosemary Staley, Chief Urban Planner

SUBJECT: Council Agenda Item
Resolution : September 14, 2004

DATE: September 9, 2004

The following item have been scheduled for City Council action as noted above. Should you have any questions, I may be contacted at 541-4718.

A Resolution 1) That the El Paso City Council authorizes the Mayor to sign a letter of transmittal to ESRI and Trimble for a government mobility demonstration program grant: planning addition; 2 That the Director of Planning, Research, & Development and the Director of Information Technology be authorized to further complete any necessary paperwork to obtain the proposed grant; 3) That, should the City of El Paso obtain the grant, it agrees to become a reference site for ESRI and Trimble, agrees to allow "City of El Paso" to appear in ESRI and Trimble press releases and educational marketing campaigns. **(All Districts)**[Planning, Research and Development, Rosemary Staley, (915) 541-4718]

Office Use Only

Mayor's Office (5 copies): *date:*_____ *time:*_____ *by:*_____
Representative District 1: *date:*_____ *time:*_____ *by:*_____
Representative District 2: *date:*_____ *time:*_____ *by:*_____
Representative District 3: *date:*_____ *time:*_____ *by:*_____
Representative District 4: *date:*_____ *time:*_____ *by:*_____
Representative District 5: *date:*_____ *time:*_____ *by:*_____
Representative District 6: *date:*_____ *time:*_____ *by:*_____
Representative District 7: *date:*_____ *time:*_____ *by:*_____
Representative District 8: *date:*_____ *time:*_____ *by:*_____

C: Pat Adauto, Deputy CAO Building and Planning Services; Rosemary Staley; Chief Urban Planner; Jim Fraser, Planner III; Rudy Valdez, Chief Urban Planner; Fred Lopez, Planner II, Lisa A. Elizondo, City Attorney; Terry Cullen Garney Deputy City Attorney; Matt Watson, Assistant City Attorney

RESOLUTION

WHEREAS, the Department of Planning , Research, and Development and the Geographic Information System (GIS) Division of Information Technology have worked closely together to develop computer generated maps for the City of El Paso; and

WHEREAS, the City of El Paso completed its first computerized land use map in the year 2000; and

WHEREAS, there exists a continual need to update and maintain a current City of El Paso land use database in order to assist city staff, elected and appointed officials in making informed decisions regarding land development issues; and

WHEREAS, ESRI, a world leader in GIS software, and Trimble, a world leader in global positioning systems (GPS), are requesting applications for demonstration projects for government mobility; and

WHEREAS, the program goal is to foster innovative approaches to solving government problems through combined use of GIS and GPS technology; and

WHEREAS, it is hoped that the result of the project is demonstrated increased efficiency in collecting data for decision support and increased productivity in delivering governmental services to include a significant increase in efficiency and accuracy of land use management throughout the City;

WHEREAS, the ESRI and Trimble software, hardware, and training grants totaling $85,000 will be awarded to 10 state, regional, or local governments within the United States; and

WHEREAS, the program provides an opportunity to create innovative solutions to current efficiency problems while working with the aide of GIS and GPS industry experts and will provide opportunity for a dramatic, substantive, and beneficial change in the City's governmental operations; and

WHEREAS, no match is required,

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

1. That the El Paso City Council authorize the Mayor to sign a letter of transmittal to ESRI and Trimble for a government mobility demonstration program grant: planning addition;

2. That the Director of Planning, Research, & Development and the Director of Information Technology be authorized to further complete any necessary paperwork to obtain the proposed grant;

3. That, should the City of El Paso obtain the grant, it agrees to become a reference site for ESRI and Trimble, agrees to allow "City of El Paso" to appear in ESRI and Trimble press releases and educational marketing campaigns.

ADOPTED THIS 14th DAY OF SEPTEMBER, 2004.

CITY OF EL PASO:

_____
Joe Wardy
Mayor

ATTEST:

_____
Richarda Duffy Momsen
City Clerk

APPROVED AS TO FORM:

_____
Matt Watson
Assistant City Attorney

APPROVED AS TO CONTENT:

_____
George G. Sarmiento
Director of Planning

_____
Tony Montoya
Director of Information Technology

September 7, 2004

Christopher Thomas
State and Local Government Solutions
ESRI

Redlands, CA 92373-8100

RE: ESRI & Trimble Demonstration Grant Program

Dear Mr. Thomas,

The City of El Paso is pleased to be submitting a grant application for a proposed GIS/GPS demonstration project. The enclosed proposal to enhance the city's GIS capabilities through GPS enabled mapping will significantly increase the efficiency and accuracy of land use management throughout the City of El Paso.

In order to manage ever-increasing development and changes in land use in El Paso, the ESRI and Trimble GIS/GPS package offered through this program will surely become an invaluable resource. The technological advance for our Planning and GIS departments will keep our community on par with other metropolitan areas around the nation and perhaps even provide our government with an opportunity to be on the cutting edge.

Thank you,

Mayor Joe Wardy
City of El Paso, 10th Floor
2 Civic Center Plaza
El Paso, Tx. 79901

GA 92-2004

GRANT APPLICATION REVIEW

DEPARTMENT	TYPE OF GRANT	CONTROL #
Planning, Research, and Development **Information Technology**	**Demonstration Project for government mobility**	824

GRANTOR	EFFECTIVE DATE	MATCHING FUND REQ
ESRI and Trimble	**Awards announced October 8, 2004**	☐ YES ☒ NO

SOURCE OF FUNDS (GRANT AMOUNT, MATCHING, IN-KIND, INTERGOVERN.)

N/A No match required. Ten state or local governments to receive software, hardware, and training to develop mobile public domain applications related to planning disciplines. See attached grant description.

PERSONNEL FUNDED BY GRANT

N/A

BRIEFLY DESCRIBE HOW GRANT WILL BE USED AND ANY SPECIAL CONDITIONS FOR GRANT:

The equipment and training provided through the grant will assist the Planning Department to maintain an annual land use for the City of El Paso to guide development and redevelopment and serve as a measurement of land use change to foster smart growth and sustainable development.

REVIEWED BY:	OMB
Cecilia Bartolli 9/1/04	David Armendariz 9-3-04
CHIEF FINANCIAL OFFICER 9/8/04	GRANTS ACCOUNTING MANAGER DT 9/7/04
CHIEF ADMINISTRATIVE OFFICER	GRANTS COORDINATOR Thomas M. Doyle 8/30/04
COMMENTS	

Mobile Government Grant Series

ESRI and Trimble Announce Call for Demonstration Projects for Government Mobility: Planning Edition

Ten State or Local Governments to Receive Software, Hardware, and Training to Develop Mobile Public Domain Applications Related to Planning Disciplines

Introduction

ESRI, the world leader in GIS software, along with Trimble, the world leader in global positioning systems (GPS), has announced its Mobile Government Grant Series. The program consists of two separate programs offering hardware, software, and training totaling $170,000. The first of the two programs is the ESRI and Trimble Government Mobility Demonstration Program: Planning Edition will be open to all planning disciplines. The second program is the ESRI and Trimble Government Mobility Demonstration Program: Homeland Security Edition is open to all disciplines engaged in Homeland Security efforts.

ESRI and Trimble Government Mobility Demonstration Program: Planning Edition

ESRI, the world leader in GIS software, along with Trimble, the world leader in global positioning systems (GPS), has announced its call for demonstration projects for government mobility serving all planning disciplines.

The goal of this program is to foster innovative approaches to solving government problems through the combined use of GIS and GPS technology. Projects must demonstrate increased efficiencies in collecting data for decision support or increased productivity in delivering government services. The ESRI and Trimble software, hardware, and training grants totaling $85,000 will be awarded to 10 state, regional, or local governments within the United States.

Program Description

The ESRI and Trimble Government Mobility Demonstration Program: Planning Edition has been established with two goals in mind. The first objective is to establish a vehicle to provide assistance to state or local government agencies in creating 10 models that demonstrate concepts related to the development and implementation of innovative GIS and

GPS applications aimed at improving government processes. The second objective is to provide reusable applications that can be shared between governments with similar projects via a public domain Web site.

The program is designed to help define mobile government as it applies to ***all planning disciplines***. Examples of eligible categories include urban, housing, redevelopment, economic development, regional, air quality, transportation, and environmental planning. Applications of GIS and GPS that aid in the collection of data to improve internal knowledge databases, assist in developing community profiles, and that improve fieldwork will be considered. The GIS/GPS projects should focus on the collection of stationary or moving data elements for the advancement of mobile government.

Definition of Mobile Government

Mobile government is the use of technologies to enable documentation, processing, and management of government issues in the field. For example, planning staff could inventory land use or the quality of housing conditions in the field and have the information compiled centrally in the office.

Additional examples of projects could draw from, but are not limited to, areas such as facility inspections and reporting, vacant property assessment, environmental management and monitoring, routing employees efficiently, vehicle tracking, code enforcement, historic preservation, population and housing enumeration, and sign inventory. While innovative ideas are embraced, ESRI and Trimble will prefer applications that enhance daily work efforts as a means of supporting the primary objectives of the program.

The demonstration grant program consists of an $8,500 GIS and GPS investment in projects that provide insight through project conceptualization, program implementation, and documentation of progress and benefits. ESRI and Trimble will provide hardware, software, and training to a total of 10 unique government agencies meeting the requirements of an eligible government organization.

Each agency considered must thoroughly communicate an understanding of the two technologies and what it will take to implement them. Eligible applicants must have some basic capacity for GIS in their organization. The program is not designed to initiate a GIS program but rather to enhance an existing program. Likewise, each agency must agree to

make the development of the application a priority as a means of developing timely and meaningful educational materials for the benefit of other government agencies.

What Is Supplied?

Each program recipient will receive the following:

1. One Trimble GeoXT (512MB) for Mobile GPS Device
2. One Trimble External Antenna for GeoXT Mobile GPS Device
3. One Trimble Extended Receiver/Field Software Enhancement
4. One Trimble GPS Correct Software Kit
5. 12-Month Subscription to Pathfinder Express
6. 12-Month Trimble Priority Support
7. One ESRI ArcPad Application Builder 6.x License That Provides
    - ArcPad 6.x for Mobile GIS
    - ArcPad Studio for Developing Custom Applications
8. One ESRI ArcPad StreetMap 6.x License
9. One Working with ArcPad Workshop Via ESRI's Virtual Campus
10. One Customizing ArcPad Course Via ESRI's Virtual Campus
11. A Copy of the ESRI Press Publication Titled *Integrating GIS and Global Positioning Systems*

To learn more about these ESRI software offerings we would encourage you to visit the ESRI ArcPad web site at http://www.esri.com/software/arcgis/arcpad/index.html. The Trimble web site can be viewed at www.trimble.com and offers wealth information.

Eligibility and Qualifications

The program is open to all forms of state and local governments in the United States, as well as all departments within a government organization. Examples of agencies that are eligible for the ESRI and Trimble GIS/GPS demonstration program include

- State Government Agencies
- Regional Governments
- Special Districts
- County Governments
- City Governments
- Townships

The government entity must identify at least one staff member who will be responsible for using the hardware and software. Likewise, the GIS and GPS technologies granted must remain in the possession of the recipient site. An outside consultant can work with this staff member, but the government may not forward the licenses or hardware to that consultant.

The government entity must have an adequate system in place to be able to forward the application code for posting on the public domain Web site.

Departments that have won a primary grant through ESRI within the past year will not be eligible for this grant.

Priority is given to organizations that do one or more of the following:

- Projects that tie GIS and GPS to daily work flow
- Projects that communicate innovative government through the use of GIS and GPS
- Organizations demonstrating collaborative efforts with multiple departments within a single agency
- Projects that demonstrate or encourage the sharing of geographically enabled GIS/GPS data with multiple jurisdictions and with interagency or interdepartmental projects

Provisions

To meet the goals of the Government Mobility Demonstration Program, applicants must confirm the availability of framework databases. This program is not designed as a means of initiating a GIS program. These framework data sets must include combinations of the following:

1. Parcel/Cadastral base
2. Street right-of-way base or street centerline base
3. Digital version of the demonstration project's geographic boundaries

Additional Requirements

- Program recipients must agree to become a reference site for ESRI and Trimble.
- Program recipients must agree to have their organization's name used in ESRI and Trimble press releases and educational marketing campaigns.

- Program recipients must agree to document and provide the mobile application code to ESRI for posting on the Mobile Government Public Domain Web site no later than April 29, 2005.

Performance Reporting

Projects selected must agree to provide ESRI and Trimble with a 2,000-word article as to the recipient's method of integrating GIS and GPS into their daily work efforts. This article must be provided digitally to ESRI within six months of the grant award. Articles should be accompanied by screen captures of ESRI software in one of the following formats—.tif or .bmp. Photographs of government employees using GIS and GPS should be forwarded in the same format.

Additional Information

The demonstration program is limited to one hardware, software, and training grant per eligible government organization. Applicants do not need to currently use ESRI software or Trimble hardware. In addition, existing customers of ESRI and/or Trimble will receive equal consideration in awarding of the grants.

- Applications will be accepted beginning July 1, 2004.
- The official deadline for all submissions is 5:00 p.m., Pacific Time, September 17, 2004.
- Awards will be announced October 8, 2004.
- Applications must be documented and submitted to the public domain Web site no later than April 29, 2005.
- Submission of articles related to the implementation of mobile government applications is due no later than April 29, 2005.
- ESRI and Trimble Web sites will be used as official notification media on the date designated as the award announcement date. Formal letters notifying the sites selected will follow.
- All recipients must agree to have their organization's name used in ESRI and Trimble press releases and marketing efforts.
- Program recipients must agree to become a reference site of both ESRI and Trimble.
- Maintenance of ESRI software and Trimble equipment become the responsibility of the program recipient.

No product or training substitutions in the grant offerings will be extended. The program is offered with the understanding that the complete hardware, software, and training suite will be used in its entirety for the purpose of developing a mobile government application for future distribution via a public domain Web site.

The public domain Web site includes a standard public domain disclaimer that expressly states the script is being placed in the public domain or is "freeware," so that the script may be freely used and redistributed. It is provided "as is" without warranty of any kind, and there is no technical support provided. To view a full version of the disclaimer, visit the ArcScripts Web site.

Procedure for Applying

Applications must be received no later than 5:00 p.m., Pacific Time, September 17, 2004. There is no formal application. We request that each applicant provide two copies of the proposed mobile government demonstration project in a double-spaced typewritten proposal addressing each of the following items in the format requested below.

A. Letter of support signed by agency head (one page maximum)
B. Organizational profile with the following details (one page maximum, double-spaced)
    - Organization name
    - Organization agency or department responsibilities (25 words or less)
    - Organization mailing address
    - Organization physical site address including street name and number
    - Estimated population within demonstration project or jurisdiction
    - Estimated number of employees in organization
    - Primary organization contact
    - Primary contact phone, fax, and e-mail (e-mail required for Virtual Campus and initial notification)
    - Secondary organization contact
    - Secondary contact phone, fax, and e-mail (e-mail required for Virtual Campus)
C. Information on the proposed GIS/GPS demonstration project (three pages maximum, double-spaced):
    - Proposed program name
    - Proposed program description
    - Proposed program goals and objectives

- Proposed units of measure for determining success of project (e.g., time savings, cost savings, productivity increases)

(D—H; three pages maximum, double-spaced)

D. Description of the use of GIS/CAD software currently used by your organization
E. Description of the use of GPS hardware currently used by your organization
F. Description of plans to distribute GIS/GPS data and applications throughout your organization
G. Description of anticipated additional uses of GIS/GPS software and hardware provided after initial project has been completed
H. Description of perceived benefits or return on investment

Optional: You can also include any appendices such as photos, screen shots, graphs, etc. that illustrate your proposal. These do not count as part of the page limit requirements.

Submitting Your Application

Two copies of the submission must be received no later than 5:00 p.m., Pacific Time, September 17, 2004. Mail applications to:

Christopher Thomas, State and Local Government Solutions

ESRI

380 New York Street

Redlands, CA 92373-8100

Review Process

An internal team of ESRI industry solutions managers and Trimble solutions managers will review all applications to determine the finalists.

ITEM B. ORGANIZATIONAL PROFILE

Organization: City of El Paso, Texas

Departments: Department of Planning, Research, and Development

Information Technology (IT), GIS Division

Department Responsibilities: The Planning Department in conjunction with the GIS Division is responsible for development of GIS as a tool to facilitate sustainable development and smart growth.

Mailing and Physical Address: Planning, Research, and Development

#2 Civic Center Plaza – 2nd floor

El Paso, Texas 79901

Estimated City Population: 594,054

Estimated Number of Employees: City of El Paso, Texas --6200

Planning Department -- 30

Information Technology -- 45

Primary Contact: George Sarmiento, Director, Planning Department

Phone (915) 541-4193, Fax (915) 541-4028

Email: sarmientogg@elpasotx.gov

Secondary Contact: Robin Ransom, GIS Manager

Phone (915) 541-4209, Fax (915) 541-4028

Email: ransomry@elpasotx.gov

Item C – PROPOSED GIS/GPS DEMONSTRATION PROJECT

Mobile Government Solutions: Using GIS and GPS to enhance and increase efficiency in maintaining the El Paso regional land use database as a tool for sound decision making in land development decisions.

Proposed Program Description: The goal of this project is to allow for more efficient collection of land use data on an on-going basis for use by all City of El Paso departments that address growth and development issues. The City of El Paso proposes to use mobile government to maintain an up-to-date GIS database of land uses compiled by the Planning, Research and Development Department to maximize field time for personnel and thereby increase the efficiency of field data collection. The GIS database will be used on a weekly basis and will assist in making better recommendations on various land development proposals by providing improved information for decision-making. The information will also assist in measuring land use changes to foster smart growth and sustainable development as part of the long range planning functions of the city.

Background

In 1999, the Planning Department began an ambitious GIS database project to update the current land use information. The last time the land use for the entire city had been researched and catalogued was in 1983 as part of the comprehensive plan update completed in the 1980's. As a further update for the Comprehensive Plan was completed and adopted in 1999, it became clear that the 1980 information was dated and that new growth areas were not adequately catalogued. The 1980 information was completed using sets of paper aerials and basemaps and coloring these in the old fashioned planning way. Using GIS technology and a protocol developed in-house by Planning staff, the ambitious project to create a computerized parcel-by-parcel up to date land use database began in 1999. The project took over two years to complete using a team of ten planners. Each team of planners was assigned to complete field work for at least two days a week during this time using the program developed in-house. On any given day as many as four teams of planners would be participating in this project during the project life. To complete the work, the Department's laptops were equipped with GIS software. Planners worked in teams of two

with one planner driving and another entering data directly into the laptop. The 331,000+ parcels of the city were catalogued this way. Obviously the laptop computers were not the best set of equipment for this kind of field work as they were uncomfortable, had to be gingerly used, and experienced a lot of wear and tear during the course of the two years. In addition, maneuvering around the computer screen while in a car with a laptop on a planner's lap to insert the graphic and text information was also hampered by the differing typing capabilities of the teams assigned to do the work with some being faster than others. This operation often created unsafe situations for field work as the planners had to drive slowly in areas where it was unclear what the land uses were though the roads adjacent called for faster driving speeds and often required planners to drive around the same parcels numerous times to ensure the visual inspection of the parcels yielded the proper information.

The City of El Paso is comprised of 251 square miles, bisected by the Franklin Mountains State Park and lies adjacent to New Mexico and Ciudad Juarez, Mexico. The County of El Paso is 1,058 square miles. Fort Bliss and Biggs Army Airfield occupy a major portion of the County to the East. The City of El Paso ranks as the 22nd largest city in the United States and the 5th largest city in Texas. The 2000 US Census indicates that 23.8 percent of the El Paso MSA is below the poverty level.

Development of a GIS system for El Paso began in the mid-1980's through the Planning Department. With a grant from the Paso del Norte Health Foundation in 1999 the Paso del Norte Mapping for Public Access (PDNMAPA) was formed as a regional GIS network, to join together to develop one comprehensive GIS program for the El Paso del Norte region. In 2002 the GIS function was moved to the Information Technology Department for the City of El Paso so that it could better serve the needs of the entire community.

Due to budget constraints and limited staff, the Department has not been able to devote large amounts of personnel time to maintaining the land use database. However, this information is critical for staff preparation of recommendations for development and redevelopment proposals, infill development, annexation proposals, etc. Often in older areas land uses have changed from what is indicated on aerials, and parcel splits have occurred that make it difficult to accurately determine the locations of structures on property. In new areas or sparsely developed areas, aerial photography has not kept pace with development, making it difficult to accurately locate new and scattered development. The location of land

use is also important in planning new transportation facilities especially through older developed neighborhoods.

One person from both GIS and Planning Department will be fully trained in the operation of the equipment and will co-train other staff members in their respective departments.

Program Goals and Objectives:

Maintain informational city databases that are necessary for staff personnel and elected officials to make informed decisions. Utilize GPS to maintain current land use as a basis for amendments to the comprehensive plan. Demonstrate system to other departments to show how their work flow can be enhanced and streamlined. Examine how development and sharing of informational databases can improve efficiency and management of city government.

Improve efficiency and accuracy of land use database. Combine field task of updating land use with other field work investigation to reduce number of staff in field. Create annual file updates to measure change and growth within city limits.

Utilize technology to enhance productivity within constrained budgets. Success will be measured by comparison with previous methods used to collect data in terms of time spent undertaking field work, accuracy of work, number of staff utilized, and reduced time spent transferring data upon return to office. Facilitate utilization of data through PDNMAPA.

Item D - GIS/CAD SOFTWARE CURRENTLY USED

Current Use of GIS/CAD Software

GIS software (ArcGIS 8.3, ArcView 3.3) is used by sixteen of thirty-five City departments. These departments include Airport, Building Permits & Inspections, City County Health, Community & Human Development, Economic Development, Office of Management & Budget's Grants section, El Paso Water Utilities, Engineering, Fire, Police, Municipal Services, Planning, Parks & Recreation, Police, Solid Waste, Streets, and Sun Metro.

The Planning, Research & Development Department has integrated GIS into all of their department functions. Planners in the Land Development section use GIS in preparation of back-up material and public notification for development applications. Neighborhood Planning initiatives are being moved

forward as planners use GIS to outline neighborhood boundaries, inventory neighborhood assets and neighborhood concerns. The research arm of the Planning department uses GIS extensively for mapping, demographics and special studies such as TIF District analysis.

In 2002 the GIS section was transplanted to the Information Technology Department from Planning. The GIS section maintains over 200 data layers, provides technical support for approximately 100 ArcView users, and mapping for city's non-users and the general public.

Item E - GPS HARDWARE CURRENTLY USED

Currently, the City of El Paso uses an Automatic Vehicle Location System on all Police, Fire & Sun Metro vehicles. The El Paso Water Utilities has four Trimble GeoXT hand held units and three Trimble ProXRS. The Engineering Department owns a Leica GPS 500 system with one base station and two rovers. The Streets department has the same Leica GPS systems with one base station and one rover. The Planning and IT Departments do not currently have GPS hardware.

Item F - DISTRIBUTION OF GIS/GPS DATA AND APPLICATIONS

Data collected from the program would be available to GIS users through the city network. Staff who have completed the city's six hour training are allowed access to GIS applications and data layers. All city GIS data layers & aerial photography is available on the city network. Original data from city departments are evaluated for placement on the public GIS server.

Other plans to distribute GIS/GPS data and applications

The data would also be distributed through the PDNMAPA website. It is a key objective in the PDNMAPA strategic plan to "perpetuate an on-line website that will increase the availability and use of shared data by providing a spatial query system, with access and download capabilities, and links to agency-specific data.

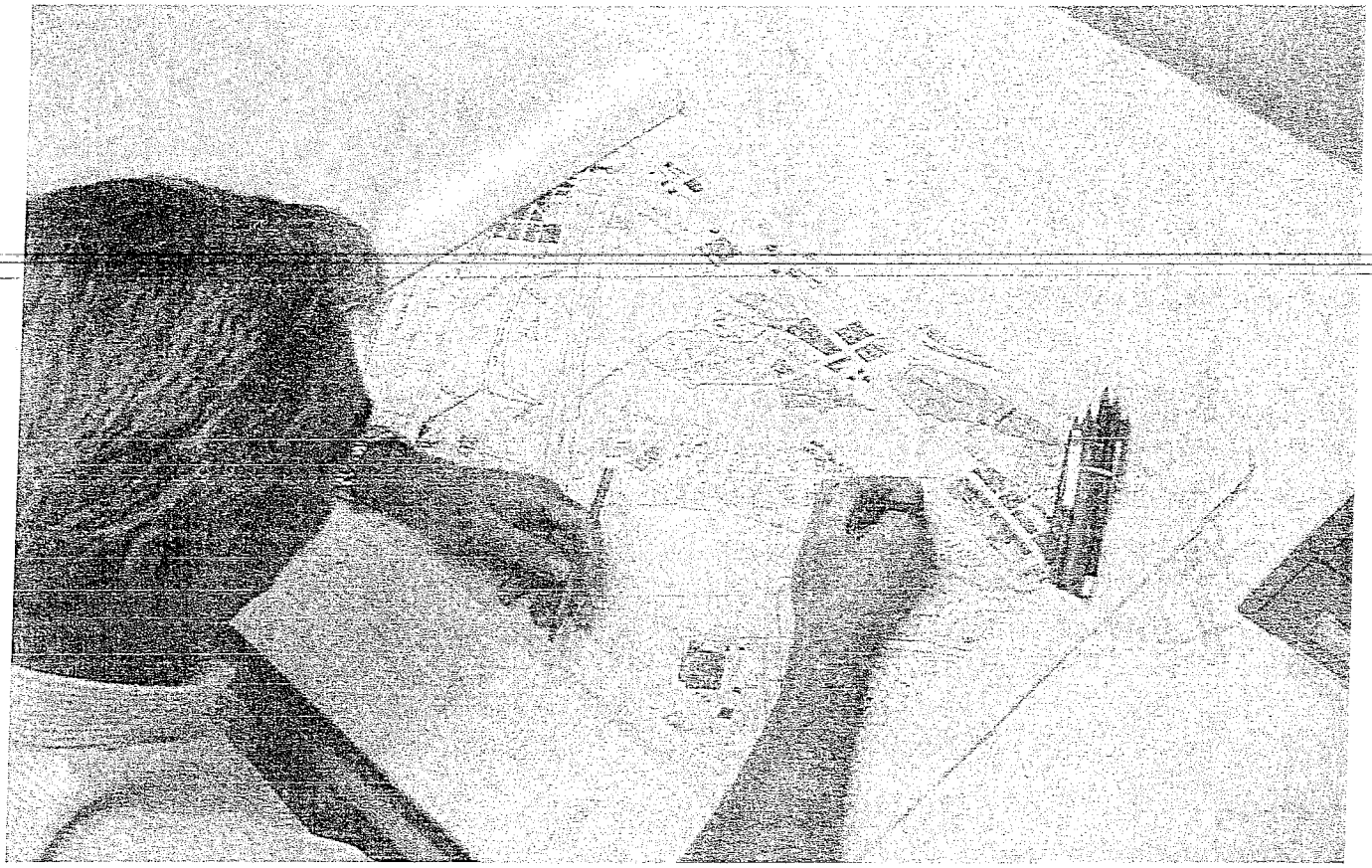
Item H – DESCRIPTION OF PERCEIVED BENEFITS OR RETURN ON INVESTMENT

The success of the project will be determined by evaluating increases in productivity, and time and cost savings. These will be measured against workflows prior to the project's initiation and can be readily determined. The Department will quantify less apparent benefits, such as improved document support and

improved planning tools for decision making, by interviewing user department heads to identify additional enterprise-wide uses for data collected and maintained.

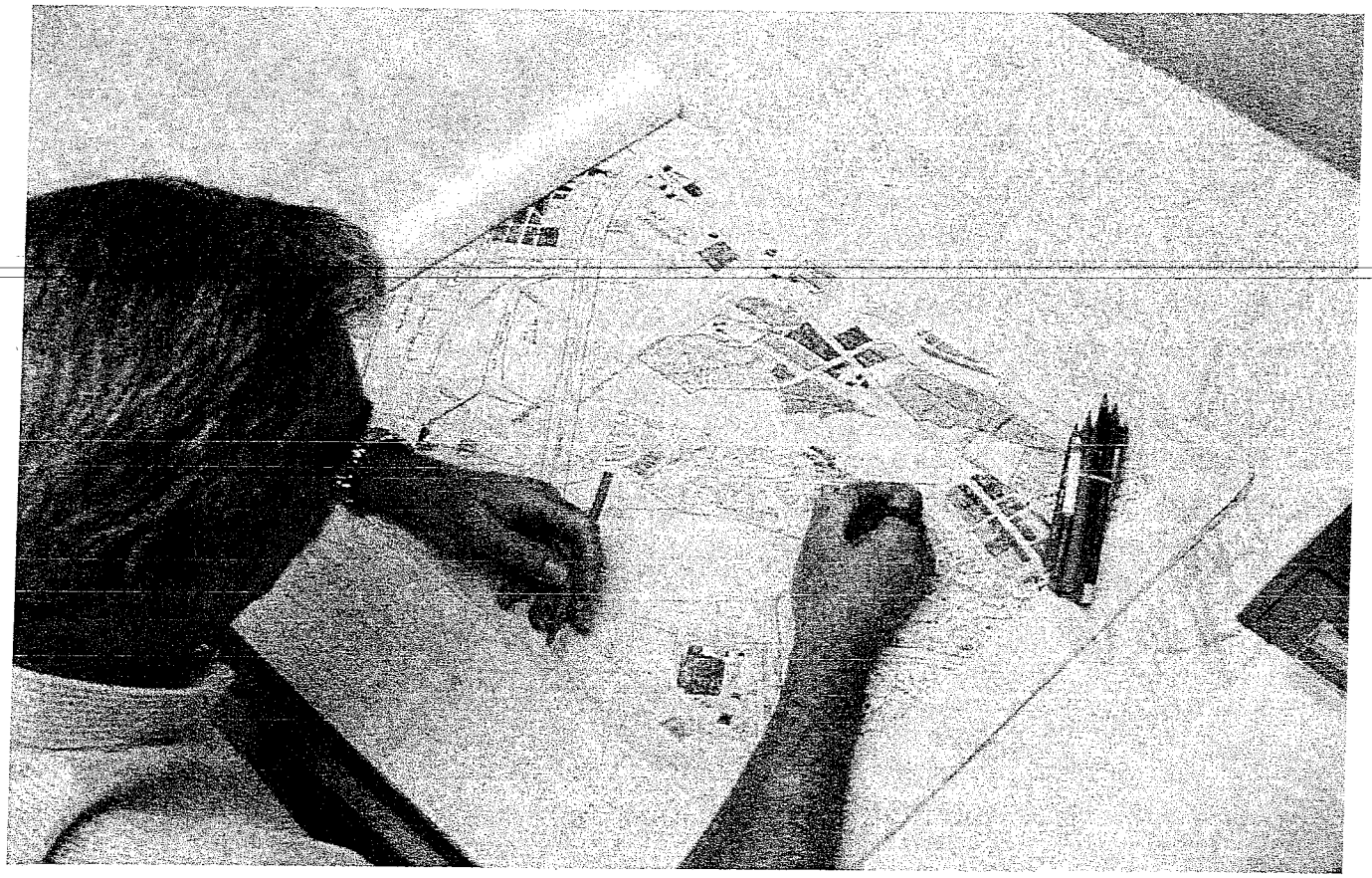
Using this technology will benefit the city by allowing for more work to be completed by fewer planners in a quicker way. The original approach required teams of two while the mobile technology will allow for one planner to do the work. Eliminating the need to have two planners do the field work will improve efficiencies from the way in which the database was originally created. These uses will also improve the speed and accuracy of fieldwork. Customizing the ArcPad edit forms with the ArcPad Application Builder will also streamline data collection in the field and allow one planner to compile the information. The data transfer at the office through the customized ArcPad set up will also be a great benefit as it too will save time and resources. In addition, when planners go out to the field to survey sites for land development cases, they will be able to also update the adjacent land use data and thus complete two tasks in one field outing thus maximizing resources. This technology translates into real savings for the City of El Paso. Improved data management and location information will result in time savings for follow up inspections, and provide improved document support for land development decisions. One of the most significant benefits will be the development of a successful, measurable demonstration project that can be showcased to other departments (and area agencies), and City decision makers to demonstrate to them how GIS and GPS can save their departments money and improve work flows.

The Department of Planning and Development will use data to assist in planning analysis. For example the data has already been used in determining blighting conditions for proposed Tax Increment Finance Districts. The data collected will also be used in making growth management decisions for land development and long range planning functions.



1983 Land Use Completed Using Colored Pencil with Paper Map Method

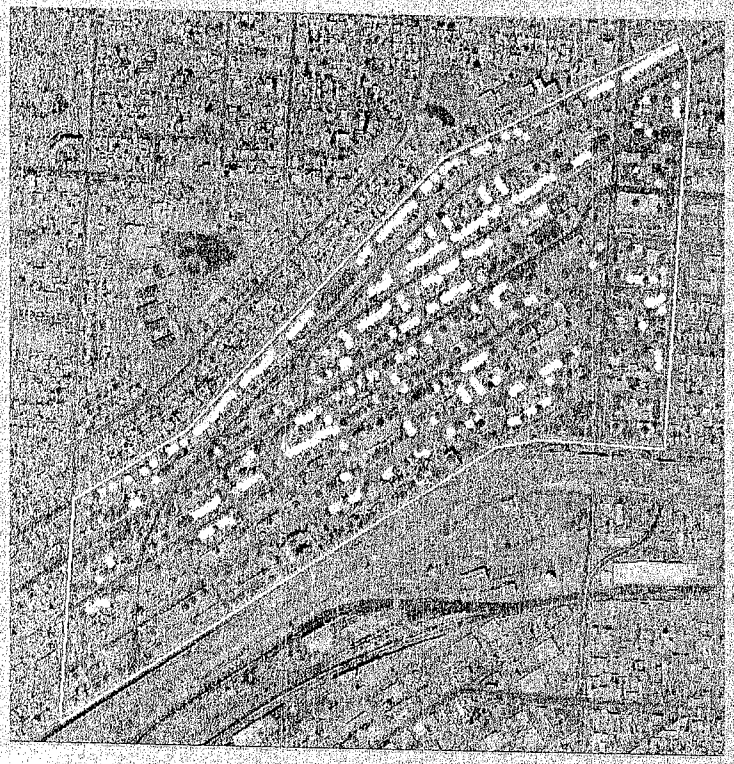
PLANNING, RESEARCH & DEVELOPMENT



1983 Land Use Completed Using Colored Pencil with Paper Map Method

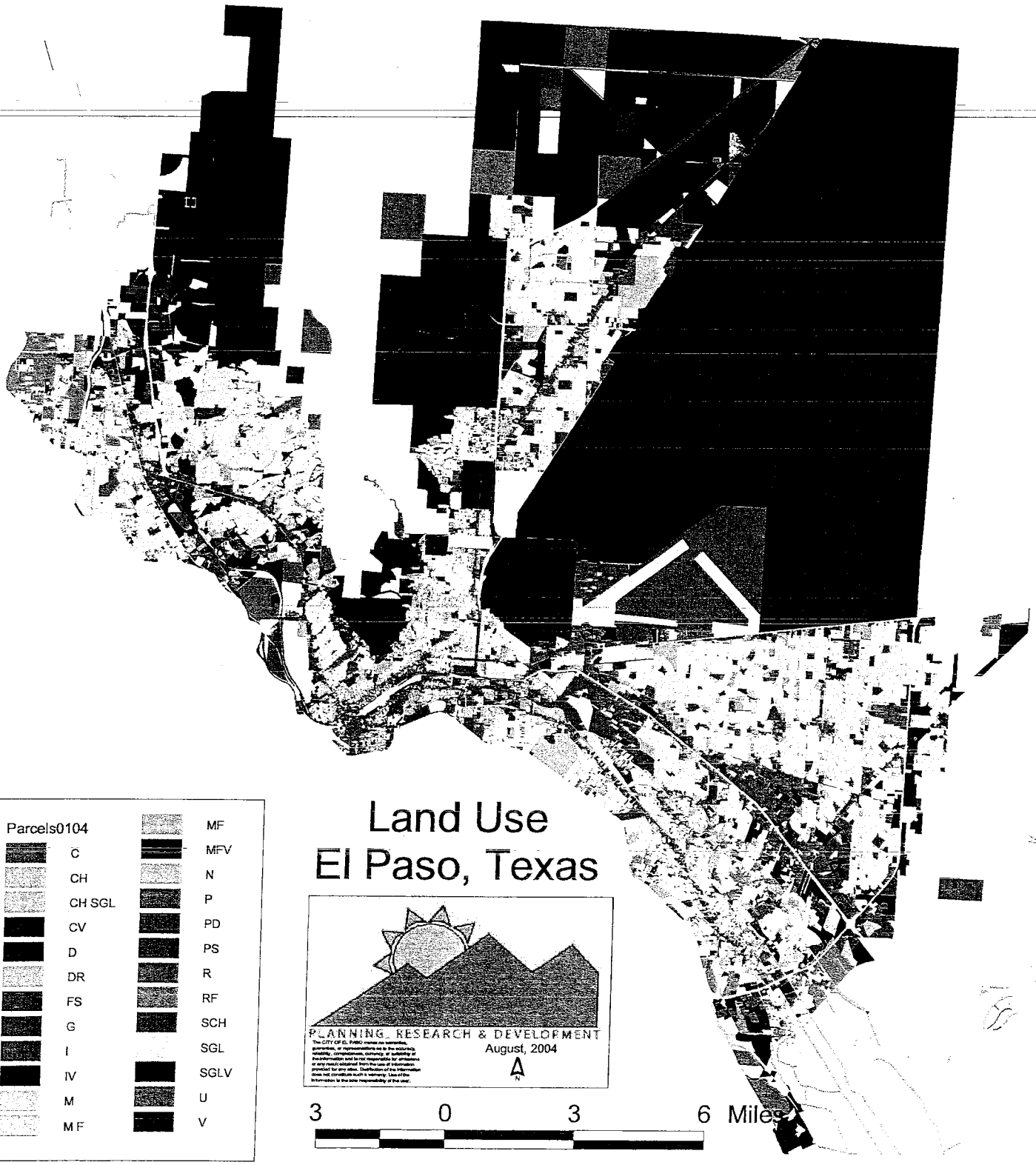
PLANNING, RESEARCH & DEVELOPMENT

Computerized Land Use



- Collect field information directly into laptop
- Addition of PID # allows interface with CAD files

- Digital map can be accessed or distributed through various media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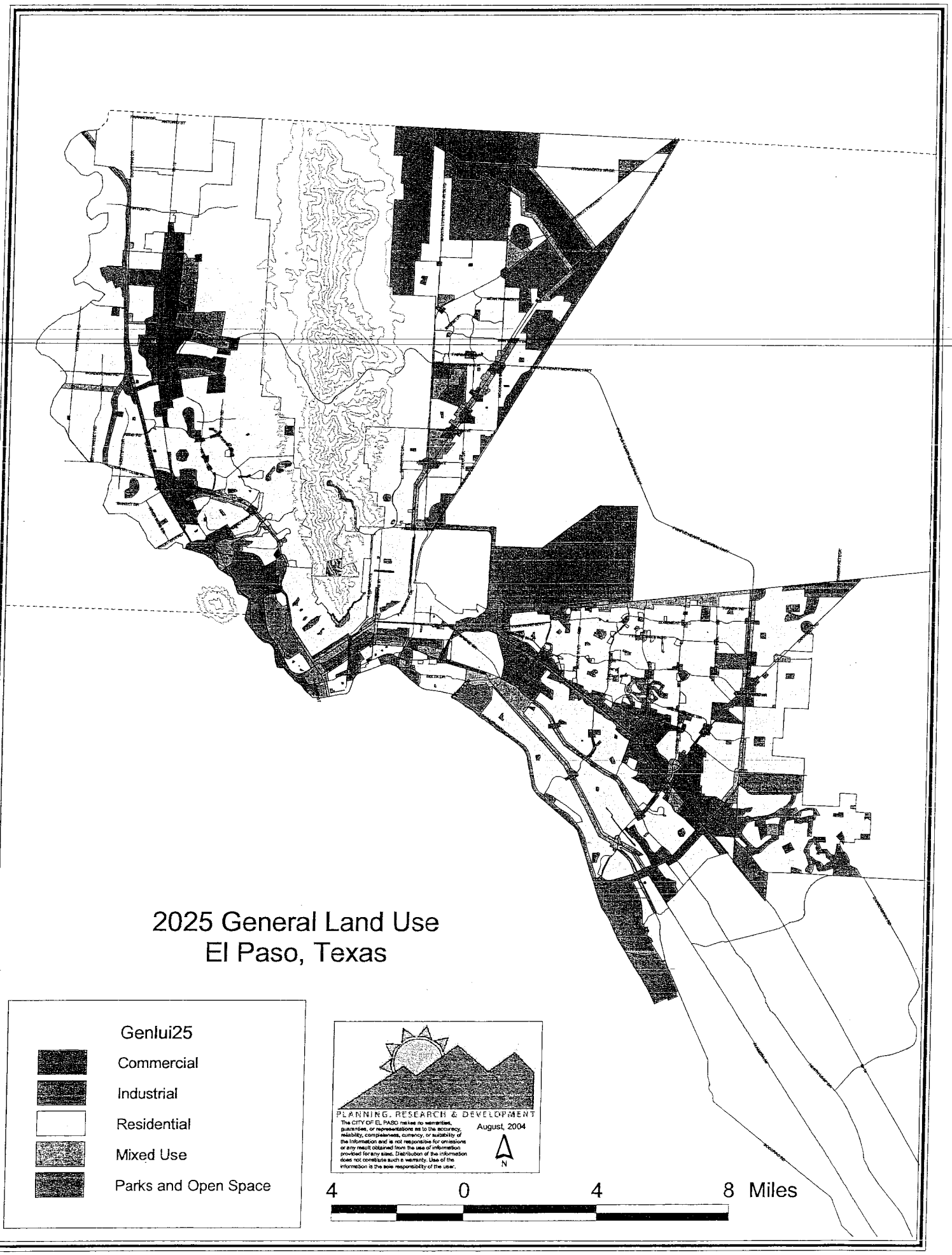
Land Use
El Paso, Texas
PLANNING, RESEARCH & DEVELOPMENT
August, 2004
3 0 3 6 Miles


2025 General Land Use
El Paso, Texas
Genlui25
Commercial
Industrial
Residential
Mixed Use
Parks and Open Space
PLANNING, RESEARCH & DEVELOPMENT
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August, 2004
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4 0 4 8 Miles